

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,206	12/12/2003	James Kelly	C1120	1794
26308 7	7590 12/28/2005		EXAMINER	
RYAN KROMHOLZ & MANION, S.C.			QIN, JIANCHUN	
POST OFFICE BOX 26618 MILWAUKEE, WI 53226			ART UNIT	PAPER NUMBER
MILWACKEE, WI 33220			2837	
		DATE MAILED: 12/28/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

·		$ \mathcal{M}$				
	Application No.	Applicant(s)				
Office Action Summany	10/735,206	KELLY, JAMES				
Office Action Summary	Examiner	Art Unit				
	Jianchun Qin	2837				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the d	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>31 C</u>	October 2005.					
3) Since this application is in condition for allowa	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-62</u> is/are pending in the application	,					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>8-10,19,20,31-34,48 and 49</u> is/are allowed.						
6)⊠ Claim(s) <u>1-7,11-18,21-30,35-47 and 50-62</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	er.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) ☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a))-(d) or (f).				
1. ☐ Certified copies of the priority documents have been received.						
Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau	•	· ·				
* See the attached detailed Office action for a list of the certified copies not received.						
į.						
·						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
 Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 	Paper No(s)/Mail Da	ate atent Application (PTO-152)				
Paper No(s)/Mail Date <u>10/31/05&11/23/05</u> 4/27/64	6) Other:	Time personal (1 10 102)				

Art Unit: 2837

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders (U.S. Pat. No. 3728929) in view of Runyon (U.S. Pat. No. 6673992) and Garitano (U.S. Pub. No. 20030017311).

Regarding claim 1, Sanders teaches a mouthpiece for a brass wind musical instrument comprising a shank, and a cup integral with the shank, the shank and cup defining an axially extending aperture configured to conduct vibrating air (col. 1, lines 56-65; col. 2, lines 10-18 and lines 25-29).

Sanders does not mention: said mouthpiece is colored; the mouthpiece being made solely from a selected polymer material; and a colorant of a selected color that imparts the selected color to the polymer material.

Runyon teaches a mouthpiece for wind musical instrument, and said mouthpiece being made solely from a selected polymer material (col. 6, lines 59-62).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Runyon in the invention of Sanders in

Art Unit: 2837

order to provide a mouthpiece for various wind musical instruments which is lightweight, less expensive, more user-friendly, and better for harmonic vibration (Runyon, col. 6, lines 59-62).

Garitano teaches a colorant of a selected color that imparts the selected color to the polymer material (page 7, 2nd col., line 5) for making musical items, including woodwind (page 9, col. 1, line 11).

It would have been obvious to one having ordinary skill in the art to modify the combination of Sanders and Runyon as taught by Garitano to color the polymer mouthpiece by include a colorant of a selected color that imparts the selected color to the polymer material for the purpose of making musical items.

3. Claims 2, 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon and Garitano, as applied to claim 1 above, and further in view of Janssen et al. (U.S. Pat. No. 5805264).

Regarding claim 2, Sanders in view of Runyon and Garitano teach the mouthpiece that includes the subject matter discussed above except that the polymer material is polycarbonate.

Janssen et al. teach process for modifying the surface characteristics of a preformed polymer substrate, wherein the polymer material is polycarbonate (col. 4, lines 26-36).

It would have been obvious to one having ordinary skill in the art to incorporate the teaching of Janssen et al. into the combination of Sanders, Runyon and Garitano as

Art Unit: 2837

one of the design choices for making a polymeric mouthpiece with polycarbonate (Janssen et al., col. 4, lines 26-36).

Regarding claim 3, It is obvious that Sanders in view of Runyon, Garitano and Janssen et al. disclose the claimed invention.

Regarding claim 7: It is obvious from the teaching of Sanders in view of Runyon,
Garitano and Janssen et al. that a brass wind instrument is an essential pad for the
mouthpiece to be inserted.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon and Garitano further in view of Janssen et al., as applied to claims 1 and 2 above, and further in view of Wean (U.S. Pat. No. 4,658,697).

Regarding claim 4, The combination of Sanders, Runyon, Garitano and Janssen et al. discloses the claimed invention except that the colorant material cooperate to render the mouthpiece transparent.

Wean teaches a transparent mouthpiece for training a student (abstract).

It would have been obvious to one having ordinary skill in the art to modify the combination of Sanders, Runyon, Garitano and Janssen et al. as taught by Wean to include the colorant material cooperate to render the mouthpiece transparent for the purpose of training a student.

5. Claims 5, 12, 13, 15, 17-18, 23, 41-42, 46-47 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon and Garitano as applied to claim 1 above, and further in view of Dolmetsch (U.S. Pat. No. 3,750,521).

Art Unit: 2837

Regarding claims 5 and 41-42, Sanders in view of Runyon and Garitano disclose the claimed invention except that the mouthpiece is manufactured by an injection molding process.

Dolmetsch teaches a mouthpiece (21) made by injection molding (col. 2, lines 19-20) for mass production.

It would have been obvious to one having ordinary skill in the art to modify Sanders in view of Runyon and Garitano's mouthpiece as taught by Dolmetsch to include the mouthpiece being manufactured by an injection molding process for the purpose of mass production.

Regarding claims 12 and 15, see above.

Regarding claims claim 13, Sanders discloses the claimed invention.

Regarding claims 17, 18, 23 and 51, it is obvious that Sanders in view of Runyon,
Garitano and Dolmtsch obviously disclose the method steps of manufacturing a
mouthpiece as claimed.

Regarding claims 46-47, Sanders discloses the steps of a. and b. (a design that replicates the traditional cup, throat, back bore and performance of brass mouthpiece...), and Sanders in view of Runyon, Garitano and Dolmtsch obviously disclose the other method steps as claimed.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon and Garitano as applied to claim 1 above, and further in view of Disera (U.S. Pat. No. 5,357,837).

Art Unit: 2837

Regarding claim 6, Sanders in view of Runyon and Garitano disclose the claimed invention except that the mouthpiece is manufactured by machining a bar of polymer material.

Disera teaches a mouthpiece (20) being manufactured by machining (col. 3, lines 59-60). Further, it is known that machining an item such as mouthpiece is a known art.

It would have been obvious to one having ordinary skill in the art to modify

Sanders in view of Runyon and Garitano's mouthpiece as taught by Disera to include
the mouthpiece being manufactured by machining a bar of polymer material for the
purpose of manufacturing the mouthpiece.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon and Garitano as applied to claim 7 above, and further in view of the applicant's admission (page 1, lines 32-34).

Regarding claim 11, Sanders in view of Runyon and Garitano disclose the claimed invention except that the polycarbonate material and the selected colorant material cooperate to render the mouthpiece a color that is gold or silver color, so that the mouthpiece color blends in with the first color.

The applicant admits that whatever the material, their colors were generally the same as the color of the instrument, i.e. gold or silver. The mouthpiece thus tended to blend into the instrument.

It would have been obvious to one having ordinary skill in the art to modify

Sanders in view of Runyon and Garitano's combination as taught by the applicant's

admission to include the polycarbonate material and the selected colorant material

Art Unit: 2837

cooperate to render the mouthpiece a color that is gold or silver color, so that the mouthpiece color blends in with the first color.

8. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano and Dolmetsch as applied to claim 41 above, and further in view of Janssen et al. (U.S. Pat. No. 5805264).

Regarding claim 44, Sanders in view of Runyon, Garitano and Dolmetsch teach the mouthpiece that includes the subject matter discussed above except that the selected polymer material is polycarbonate.

Janssen et al. teach process for modifying the surface characteristics of a preformed polymer substrate, wherein the polymer material is polycarbonate (col. 4, lines 26-36).

It would have been obvious to one having ordinary skill in the art to incorporate the teaching of Janssen et al. into the combination of Sanders, Runyon, Garitano and Dolmetsch as one of the design choices for making a polymeric mouthpiece with polycarbonate (col. 4, lines 26-36).

9. Claims 14, 43 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano and Dolmetsch as applied to claims 12, 41 and 46 respectively above, and further in view of Wean.

Regarding claims 14, 43, and 50, see above.

10. Claims 16 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano and Dolmetsch as applied to claims 12 and 41 respectively above, and further in view of Getzen (U.S. Pat. No. 4,754,682).

Art Unit: 2837

Regarding claims 16 and 45, the combination of Sanders, Runyon, Garitano and Dolmetsch discloses the claimed invention except that the mouthpiece is further manufactured by a secondary machining process subsequent to removing the mouthpiece from the molds.

Getzen teaches a mouthpiece is further manufactured by a secondary machining process subsequent to removing the mouthpiece from the molds for providing a very accurate bore (col. 2, lines 20-24, and col. 4, lines 42-45).

It would have been obvious to one having ordinary skill in the art to modify

Sanders in view of Runyon and Garitano further in view of Dolmetsch's mouthpiece as
taught by Getzen to include that the mouthpiece is further manufactured by a secondary
machining process subsequent to removing the mouthpiece from the molds for the
purpose of providing a very accurate bore.

11. Claims 21 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano and Dolmetsch as applied to claim 17 above, and further in view of Getzen.

Regarding claims 21, 24 and 25, see above.

12. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano and Dolmetsch as applied to claim 17 above, and further in view of Wean.

Regarding claim 22, see above.

Application/Control Number: 10/735,206 Page 9

Art Unit: 2837

13. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano and Dolmetsch as applied to claim 17 above, and further in view of the applicant's admission.

Regarding claim 26 and 27, see above.

14. Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano, Dolmetsch and Getzen.

Regarding claim 28, see above.

Regarding claim 29, Sanders in view of Runyon and Garitano disclose the claimed invention.

15. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano, Dolmetsch and Getzen as applied to claim 28 above, and further in view of Wean.

Regarding claim 30, see above.

16. Claims 35-36, 38, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano, Dolmetsch and Getzen.

Regarding claims 35 and 36, it is obvious that Sanders in view of Runyon, Garitano, Dolmetsch and Getzen disclose the method steps as claimed.

Regarding claim 38, see above.

Regarding claim 39, Sanders in view of Runyon and Garitano disclose the claimed invention.

Art Unit: 2837

17. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano and Dolmetsch as applied to claim 35 above, and further in view of Disera.

Regarding claim 37, see above.

18. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano, Dolmetsch and Getzen as applied to claim 36 above, and further in view of Wean.

Regarding claim 40, see above.

19. Claims 52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano and Dolmetsch as applied to claim 46 above, and further in view of the applicant's admission.

Regarding claims 52 and 53, see above.

20. Claims 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano and Disera.

Regarding claim 54, see above.

Regarding claims 55, see above.

21. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano and Disera as applied to claim 54 above, and further in view of Wean.

Regarding claim 56, see above.

Art Unit: 2837

22. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon, Garitano and Disera as applied to claim 54 above, and further in view of Janssen et al.

Page 11

Regarding claim 57, see above.

23. Claim 58-59, and 61-62 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Runyon and Disera.

Regarding claim 58, Sanders in view of Runyon disclose the claimed invention except that the step of providing a bar of a selected polymer material and machining the bar into a brass instrument mouthpiece.

Disera teaches a mouthpiece (20) being manufactured by machining (col. 3, lines 59-60). Further, it is known that machining an item such as mouthpiece is a known art.

It would have been obvious to one having ordinary skill in the art to modify

Sanders in view of Runyon's method of manufacturing a mouthpiece as taught by

Disera to include the mouthpiece being manufactured by machining a bar of polymer material for the purpose of manufacturing the mouthpiece.

Regarding claims 59 and 61, Sanders in view of Runyon discloses the claimed invention.

Regarding claim 62, see above.

24. Claim 60 is rejected under 35 U.S.C. 1O3(a) as being unpatentable over Sanders in view of Runyon and Disera as applied to claim 58 above, and further in view of Wean.

Regarding claim 60, see above.

:

Application/Control Number: 10/735,206 Page 12

Art Unit: 2837

Allowable Subject Matter

25. Claims 8-10, 19-20, 31-34 and 48-49 are allowed.

Reasons for Allowance

26. The claims are allowable over the prior art for at least the reason that the prior art fails to reasonably teach or suggest in claims 8, 19 and 48 that the polycarbonate material and the selected colorant cooperate to render the mouthpiece a color that is neither brass, gold, nor silver color, and in claim 31 that a mouthpiece bounded by a first outer periphery and a first aperture, the mouthpiece being fabricated by molding a mixture of polymer material and selected colorant material into a blank having a second outer periphery and a second aperture, and by performing a primary machining operation on the blank second outer periphery and second aperture to produce the first outer periphery and the first aperture as set forth in the claimed combination.

In regard to dependent claims 9, 10, 20, 32-34 and 49, they are allowed once the independent claim they depend on is allowed, even though they may contain allowable subject matter themselves.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/735,206 Page 13

Art Unit: 2837

Response to Arguments

27. Applicant's arguments received 10/31/05 with respect to claims 1-62 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1-7, 11-18, 21-30, 35-47 and 50-62 are rejected as new prior art references (U.S. Pat. No. 3728929 to Sanders and U.S. Pat. No. 6673992 to Runyon) have been found to teach, together with other cited references, the claimed invention recited in the claims listed above. Detailed responses are given in sections 2-24 as set forth above in this Office Action.

Contact Information

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jianchun Qin whose telephone number is (571) 272-5981. The examiner can normally be reached on 8:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.

DAVID MARTIN SUPERVISORY PATENT EXAM** *ECTNOLOGY CENTER 2

Examiner Art Unit 2837

December 21, 2005